This Page Is Inserted by IFW Operations and is not a part of the Official Record

BEST AVAILABLE IMAGES

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images may include (but are not limited to):

- BLACK BORDERS
- TEXT CUT OFF AT TOP, BOTTOM OR SIDES
- FADED TEXT
- ILLEGIBLE TEXT
- SKEWED/SLANTED IMAGES
- COLORED PHOTOS
- BLACK OR VERY BLACK AND WHITE DARK PHOTOS
- GRAY SCALE DOCUMENTS

IMAGES ARE BEST AVAILABLE COPY.

As rescanning documents will not correct images, please do not report the images to the Image Problem Mailbox.

Sheet 1 of 9

Express Mail Label No.: EV088615307US

Titl: High Efficiency Tantalum-Based Ceramic Composite Structures Inventors: David A. Stewart, et al. NASA Case No.: ARC-14710-1 NASA POC: Vickie Kent (650) 604-0887

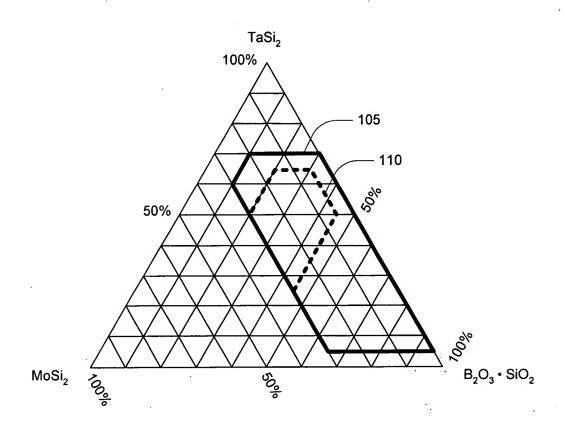
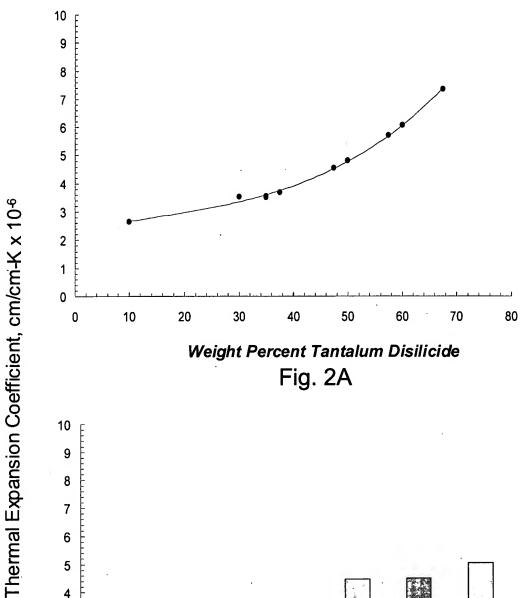


Fig. 1

Sheet 2 of 9

Express Mail Label No.: EV088615307US

Titl : High Efficiency Tantalum-Based Ceramic Composite Structures Inventors: David A. Stewart, et al. NASA Case N .: ARC-14710-1 NASA POC: Vickie Kent (650) 604-0887



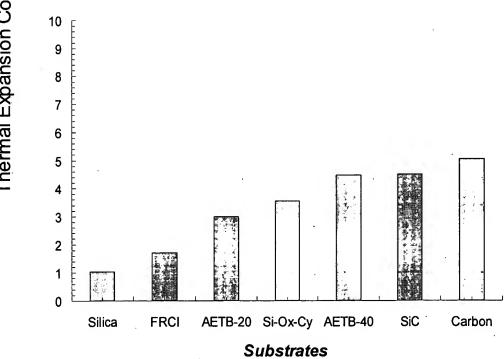
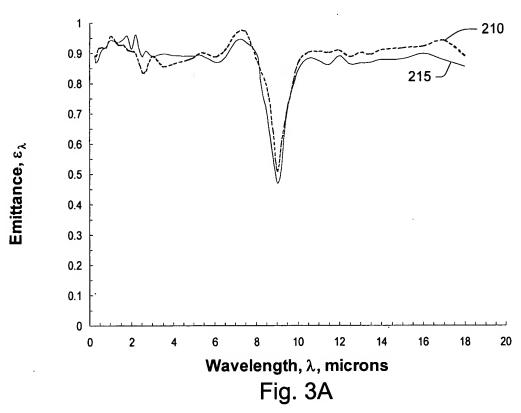
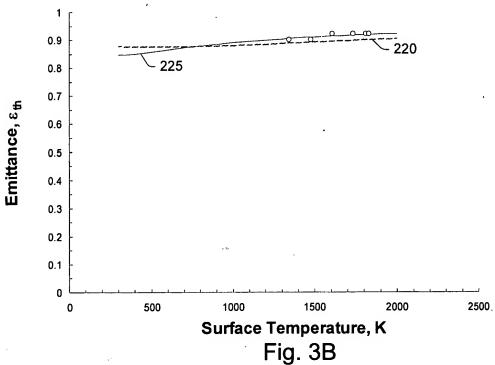


Fig. 2B

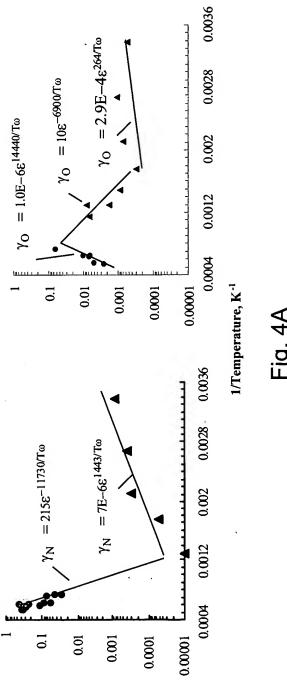
Sheet 3 of 9
Express Mail Label No.: EV088615307US
Title: High Efficiency Tantatum-Based Ceramic Composite Structures
Inventors: David A. Stewart, et al.
NASA Case N .: ARC-14710-1
NASA POC: Vickle Kent (650) 604-0887





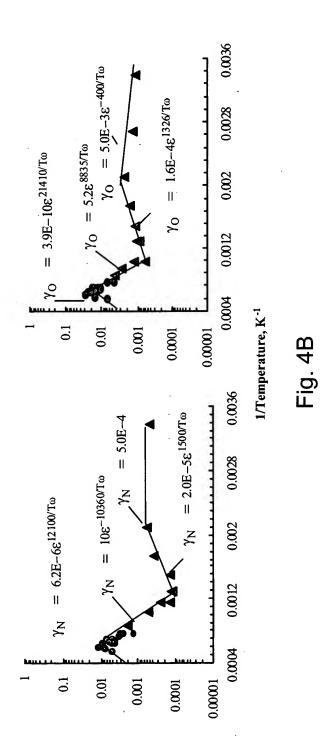
Sheet 4 of 9
Express Mail Label No.: EV088615307US Title: High Efficiency Tantalum-Based Ceramic Composite Structures

Inventors: David A. Stewart, et al. NASA Case No.: ARC-14710-1 NASA POC: Vickie Kent (650) 604-0887



Sheet 5 of 9
Express Mail Label N .: EV088615307US
Titl : High Efficiency Tantatum-Based Ceramic Composite Structures
Inventors: David A. Stewart, et al.

NASA Case No.: ARC-14710-1 NASA POC: Vickie Kent (650) 604-0887



Sheet 6 of 9
Express Mail Label No.: EV088615307US

Titl: High Efficiency Tantalum-Based Ceramic Composite Structures Inventors: David A. Stewart, et al.

Inventors: David A. Stewart, et al. NASA Case No.: ARC-14710-1 NASA POC: Vickie Kent (650) 604-0887

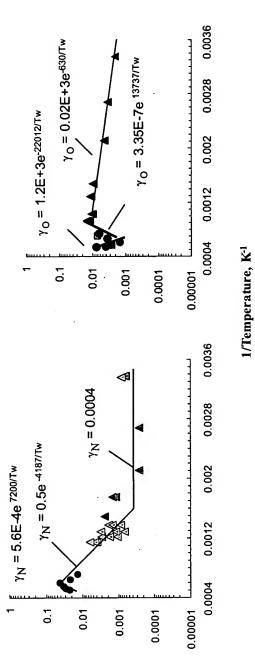
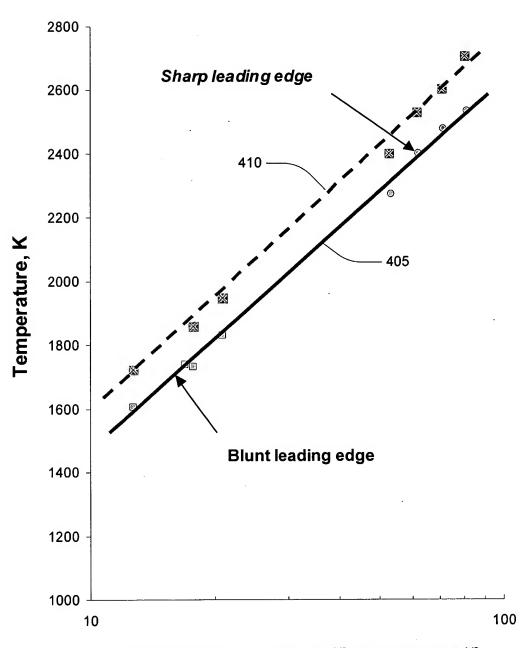


Fig 4C

Sheet 7 of 9
Express Mail Label No.: EV088615307US
Title: High Efficiency Tantatum-Based Ceramic Composite Structures
Inventors: David A. Stewart, et al.
NASA Case No.: ARC-14710-1
NASA POC: Vickie Kent (650) 604-0887



Relative Enthalpy, $Heo(P_o/R)^{1/2}$, $MJ/kg(atm/M)^{1/2}$

Fig. 5

Sheet 8 of 9 Express Mail Label No.: EV088615307US Titl: High Efficiency Tantatum-Based Ceramic Composite Structures
Inventors: David A. Stewart, et al.
NASA Case N.: ARC-14710-1

NASA POC: Vickie Kent (650) 604-0887

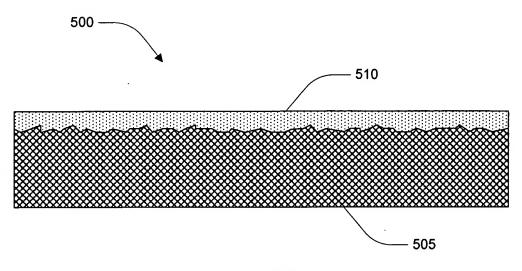


Fig. 6A

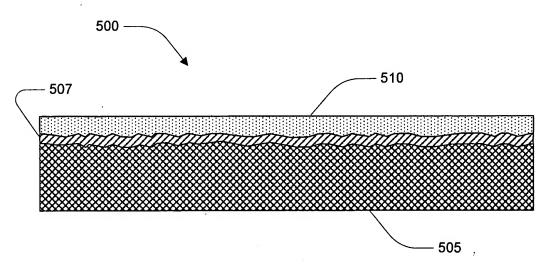


Fig. 6B

Sheet 9 of 9
Express Mail Label N .: EV088615307US

Title: High Efficiency Tantalum-Based Ceramic Composite Structures Inventors: David A. Stewart, et al. NASA Case No.: ARC-14710-1 NASA POC: Vickie Kent (650) 604-0887

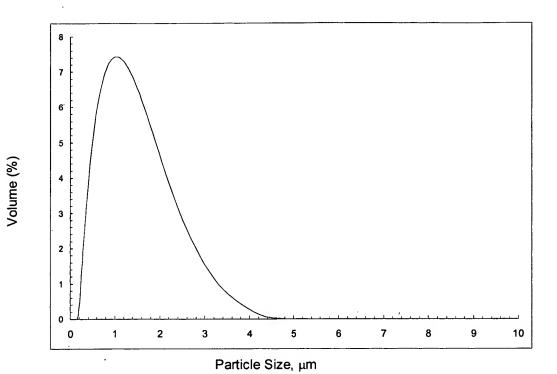


Fig. 7

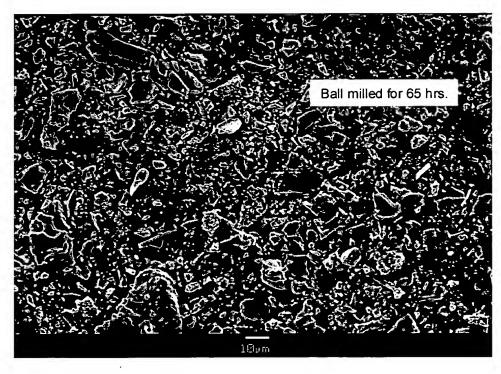


Fig. 8